Application No.: 10/518,811 Attny. Docket: 22409-00113-US

AMENDMENTS TO THE SPECIFICATION

1. Please amend the Specification of the captioned Application as set forth below.

2. Please replace the paragraph on page 2, beginning with line 25 of Applicants' submitted

specification:

International patent publication WO 00/69513 describes a number of embodiments of an electrode array that may be used to deliver electrical stimulation to the associated regions of the eochlear cochlea in order to supplement hearing of high frequency sounds. In this publication, a relatively short and thin electrode array is described as being between 6-8mm in length and which is inserted through a small slit in the round window membrane for stimulation of the basal end of the scala tympani duct of the cochlea. In order to maintain the hydrodynamic nature of the cochlea, the described electrode array is provided with flexible flaps at its proximal end to assist in sealing the round window membrane and also to maintain the array in a position that is remote from both walls of the cochlea.

3. Please replace the paragraph on page 8, beginning with line 14 of Applicants' submitted

specification with the following rewritten paragraph:

In a further embodiment of this aspect, the method can comprise an additional step prior to step (ii), in which a faeia <u>fascia</u> washer is fabricated and placed over said electrode array prior to its insertion into the cochlea. The <u>faeia fascia</u> washer can comprise a piece of temporalis fascia that is harvested from the recipient. The <u>faeia fascia</u> washer can have dimensions of 3mm x 3mm. Once harvested, the washer can be pressed in a fascia press, before a sharp round instrument, such as a straight pick, is used to create a hole (eg. 0.4mm in size) in the central portion of the stamp-like piece of fascia. The tip of the electrode is then passed through the hole until the fascia abuts the dacron mesh. The electrode is then placed into the cochleostomy. The fascia washer assists in sealing the inner ear from the middle ear.

Page 6

Application No.: 10/518,811 Attny. Docket: 22409-00113-US

4. Please replace the paragraph on page 16, beginning on line 37 of Applicants' submitted specification with the following rewritten paragraph:

The electrode array 30 also includes an indicator means 38 incorporated into the collar 35 to assist the surgeon in determining the orientation of the electrodes 32, once inserted into the cochlea. As the portion of the array, shown generally as 39, is intended to be inserted into the cochlea with only the mesh material 36 and the collar 35 being external of the eochlear cochlea, it is important that the surgeon is provided with an indication as to the orientation of the surface of the array bearing the electrodes 32. In one embodiment, the indicator means could be a portion of Dacron mesh correctly positioned on the collar 35 via a fastening means such as glue, and covered with a clear silicone material, preferably the same material as that used to make the collar portion 35, to reform the tubular shape of the collar 35.

5. Please replace the paragraph on page 20, beginning with line 6 of Applicants' submitted specification with the following rewritten paragraph:

The electrode array of the present invention is preferably inserted into the eochlear cochlea in the following manner. As the intention of the present invention is to preserve as much of the recipient's residual hearing as possible so that only high frequency sounds are provided electrically, it is desirable that the structure of the cochlea is left intact as much as possible. Therefore, rather than incising the round window membrane, a cochleostomy is formed. The cochleostomy is preferably made 1mm anteroinferior to the round window and is preferably achieved using either a "soft surgery" technique or by drilling with a diamond burr or laser. The electrode array is then inserted into at least the basal region of the cochlea and secured in place as mentioned above. Prior to closing the cochleostomy, tissue or muscle is packed behind the mesh to create a fascia washer. The fascia washer assists in sealing the cochleostomy and ensuring that the hydrodynamic nature of the cochlea is maintained.

Application No.: 10/518,811 Attny. Docket: 22409-00113-US

6. Please replace the paragraph on page 20, beginning with line 26 of Applicants' submitted specification with the following rewritten paragraph:

Turning to Figure 6, there is shown the device of the present invention according to a further embodiment. In this embodiment, the device is shown generally as 50, and represents the implantable portion of the system. With reference to Figure 1, the receiver coil 23 is shown as well as the receiver stimulator unit 22. Extending from the receiver stimulator unit 22 are three electrode arrays 51, 52, 53. Array 51 corresponds with the short electrode array having a collar as described above, which is inserted into the basilar region of the eochlear cochlea to provide electrical stimulation for high frequency sounds in accordance with the first embodiment of the present invention. Array 52 is essentially a conventional electrode array consisting of a plurality of electrodes arranged along the length thereof to provide electrical stimulation for sounds of all frequencies as is the case for conventional cochlear implant devices. Array 52 can be placed into the cochlea if further hearing loss occurs in the future. Array 53 is an extra cochlear electrode as is known in conventional cochlear implants which is positioned remote from the eochlear cochlea to provide a reference point for various modes of stimulation.

7. Applicants respectfully disagree with the Examiner with regard to the Examiner's specification objection 5(c) on page 4 of the Office Action. Applicants assert that "cochlear fluid" is proper instead of the Examiner's suggested "cochlea fluid".